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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/847,236 | 05/02/2001 | Jerry W. Schoen | A2714 | 5953 |
| 26874 | 7590 | 04/13/2010 | EXAMINER | |
| FROST BROWN TODD, LLC 2200 PNC CENTER 201 E. FIFTH STREET CINCINNATI, OH 45202 | | | | SHEEHAN, JOHN P |
| ART UNIT | | PAPER NUMBER | | |
| 1793 | | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 04/13/2010 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@fbtlaw.com

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/847,236 | SCHOEN ET AL. | |
| | Examiner | Art Unit | |
| | John P. Sheehan | 1793 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 December 2009.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 21-29 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the Group I claims 1 to 20 in the telephone restriction requirement on May 23, 2002 is acknowledged. Although in the response submitted December 31, 2009 applicants have acknowledged their election, applicants did not distinctly and specifically point out the supposed errors in the restriction requirement, therefore the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Labels

2. In the response submitted December 31, 2009 applicants have not labeled non-elected claims 21 to 29 as "(withdrawn)". Applicants are advised that in future amendments claims 21 to 29 should be labeled as "(withdrawn)".

Claim Objections

3. Claim 7 is objected to because of the following informalities:

I. In claim 7, line 2 it appears that –of—should be inserted after "consists". Appropriate correction is required.

Claim Rejections - 35 USC § 112, 2nd Paragraph

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 to 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I. The claims employ the open claim language, "comprising" (for example, claim 1, line 4) which leaves the claim open to any additional components even in major amounts (MPEP 2111.03). However, the claims also employ the term "balance" (for example, claim 1, line 6) which closes the claim to the inclusion of components other than those recited, except for impurities ordinarily associated therewith. The claims are indefinite in that in view of the use of both open and closed claim language it is not clear whether the claims are limited to only the recited components or are open to the inclusion of additional components. Applicants are advised that for the purpose of this first Office action on the merits the claims will be interpreted as open when considering the prior art. If in response to this rejection applicants state that the term "balance" (or "remainder") should be interpreted as open then the Examiner will maintain the position regarding the applied prior art as appropriate and will consider any other arguments and amendments. If applicants state the term "balance" (or "remainder") closes the composition to additional components then the Examiner will accept that definition on the record and evaluate the prior art accordingly.

II. In claim 1, line 6, it is not clear what is encompassed by the term, "residual elements". Do applicants mean impurities? If this the case then this

rejection may be obviated by deleting the phrase, "residual elements" and inserting the word --impurities--.

III. In claim 1, line 9, the phrase, "said hot rolled band" lacks a clear antecedent.

IV. In claim 1, line 10, the phrase, "the hot process band" lacks a clear antecedent.

V. In claim 1, line 11, the phrase, "the band" lacks a clear antecedent.

For example, does this term refer to the "band" of line 3?

VI. In claim 1, line 15, the phrase, "the annealed strip" lacks a clear antecedent. For example, does this annealed strip of line 13 or the decarburized annealed strip of line 14?

VII. In claim 15, "the manganese" lacks a clear antecedent.

VIII. In claim 16, "the tin" lacks a clear antecedent.

IX. In claim 17, "the sulfur and/or selenium" lacks a clear antecedent.

X. In claim 18, "the copper" lacks a clear antecedent.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 1 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huppi (US Patent No. 5,643,370).

Huppi teaches a method of making grain oriented electrical steel having a composition that overlaps the alloy composition recited in the instant claims (column 4, lines 10 to 26) including two specific example alloys that are encompassed by the alloy composition of the instant claims (columns 11 and 12, Table 2, Alloys N and O). Huppi teaches that the disclosed alloys have a resistivity of at least 50 micro-ohm-cm (column 4, lines 31 to 32) and an austenite volume percent of between 10 to 40 % (column 6, lines 30 to 40). Huppi also teaches a process that overlaps the instantly claimed process steps including providing a strip having a thickness of 2.5 mm, annealing, cold rolling, annealing the cold rolled strip, decarburization annealing, coating the annealed strip and final annealing the coated strip to provide a steel with a permeability at 796 A/m of at least 1840 (column 10, line 5 to column 12, line 9; Tables 2 and 3). Huppi teaches that during cold rolling the steel alloy can be subjected to a reduction of at least 80% during the last cold rolling (column 11, line 11).

The claims and Huppi differ in that although Huppi teaches all aspects of the instantly claimed invention Huppi does not teach a specific example that embodies all aspects of the claimed invention.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloy composition and properties and the process steps taught by Huppi overlap the alloy composition and

properties and the process step recited in the instant claims and thereby establish a prima facie case of obviousness, In re Malagari, 182 USPQ 549 and MPEP 2144.05.

Response to Arguments

4. Applicants' response submitted December 31, 2009 has been considered and overcomes the following rejections;
 - I. The rejection of claims 1 to 20 under 35 U.S.C. 112, first paragraph, as based on a disclosure that is not enabling has been overcome in view of applicants amendment to claim 1.
5. Regarding the rejection of claims 1 to 20 under 35 U.S.C. 112, second paragraph, as being indefinite for employing both the open claim language, "comprising" (for example, claim 1, line 4) and the closed language "balance" (for example, claim 1, line 6), applicants have changed "comprising" occurring in claim 1, line 2 to "consisting essentially of". This is not persuasive. The rejection, as set forth in the first Office action, was directed to the occurrence of "comprising" appearing in claims 1, line 4 and "balance" appearing in claim 1, line 6 and not the occurrence of "comprising" amended by applicants appearing in claim 1, line 2.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (7:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John P. Sheehan/
Primary Examiner
Art Unit 1793

JPS